



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3334241>Available online at: <http://www.iajps.com>

Research Article

**PREVALENCE OF ANXIETY AND STRESS AMONG MEDICAL  
AND DENTAL MEDICAL COLLEGE STUDENTS**Noorulain Niazi<sup>1</sup>, Muhammad Usman Yamin Chawla<sup>2</sup>, Mustapha Shesh<sup>3</sup><sup>1</sup>Islamabad Dental Hospital, <sup>2</sup>DHQ Kasur, <sup>3</sup>Venus Hospital Midbaneshwor.

Article Received: May 2019

Accepted: June 2019

Published: July 2019

**Abstract:**

*Stress and anxiety happen when an individual is not able to handle a particular situation. Objective: To determine the prevalence of anxiety and stress among medical and dental medical college students. Material and Methods: This cross-sectional study included 242 medical students from the final year from different medical and dental colleges of Pakistan. A pre-designed questionnaire was served to the students. Different questions about stress and related risk factors were asked from the students. Data were collected and analyzed with SPSS Ver. 23.0. Results: The mean age of the students was 23.09±2.30 years. Thirty-one students (17.32%) told that they never experienced stress or anxiety during their academics and ward-rotations. One hundred and forty-eight students (82.68%) reported that they faced stress and anxiety somewhere in their academics. Among different types of factors leading to this stress and anxiety were family problems (13.51%), hostel life (27.03%), improper diet (8.78%), chronic diseases (3.38%), fear of future (21.62%), and assignment and examinations (25.68%). Conclusion: Students from medical and dental colleges had to face a lot of stress and anxiety during their academic sessions. This stress may be for a shorter period of time or may be prolonged depending on one's ability to cope with this stress.*

**Keywords:** Anxiety, Stress, Medical, Dental students.**Corresponding author:**

Noorulain Niazi,

Islamabad Dental Hospital.

QR code



Please cite this article in press Noorulain Niazi et al., *Prevalence Of Anxiety And Stress Among Medical And Dental Medical College Students.*, Indo Am. J. P. Sci, 2019; 06(07).

**INTRODUCTION:**

According to studies, anxiety and stress are increasing day by day in this modern world. This increase has been noticed exponentially in the young generation because they are unable to handle different types of tough and problematic situations. The young generation especially the students are coping with different kinds of problems i.e. their academics, jobs, financial growth as well as stability. With the passage of time, the population is increasing leading to different socio-economic issues, illnesses, lower incomes, and more family dependents, etc. hence resulting in more stress and anxiety [1].

According to different studies, the prevalence of anxiety and stress is increasing exponentially day by day. Khan et al. documented the prevalence rate of stress up to 70% in different medical colleges of Pakistan [2]. This ratio was 31.2% and 41.9% in Great Britain and Malaysia respectively [3]. It is seen that a medical student has to undergo a lot of pressure especially during their academics and ward training resulting in increased stress and pressure [4]. Some of the other factors that contribute to this stress are fewer recreational activities, limited openings, and difficult hostel life. In our culture, where people live in combined families are socially interactive, living in hostels may contribute negatively resulting in increased stress. Other factors might be the improper meals they get during their hostel life, fewer recreations and leisure opportunities during their academics and certain diseases that may limit one's daily activities [5]. This stress and anxiety can lead to certain complications i.e. hypertension, muscular diseases, CVS problems, and mental health issues. If medical students had to face these conditions, they may not be able to perform well in their academics leading to poor training, therefore hampering proper treatment of patients [6-8].

The purpose of this study to determine the prevalence of stress and anxiety medical and dental medical college students. This study also included some questions related to different risk factors leading to stress and anxiety. This study will ultimately help us in helping medical students adopting a stress-free life and empower them to face a different kind of problem in a better way.

**MATERIAL AND METHODS:**

We conducted this cross-sectional study in final year medical students from different medical and dental colleges of Pakistan. Total of 242 students was included in this study. Students living in the hostel were included. Day scholars and married students were excluded from this study. After informed consent, a pre-defined questionnaire was served. Data was collected and analyzed in SPSS 23.0. Categorical variables were presented as frequencies and percentages and quantitative variables were presented as mean and standard deviations.

**RESULTS:**

Out of two hundred and forty-two students, only 179 students responded. The response rate was 73.96%. Among 179 students 116 (64.80%) students were MBBS students and 63 (35.20%) were BDS students. There was 118 (65.92%) female students and 61 (34.08%) male students. The mean age of the students was  $23.09 \pm 2.30$  years. The minimum age noticed was 21 years and maximum age noticed was 25 years. Thirty-one students (17.32%) told that they never experienced stress or anxiety during their academics and ward-rotations. One hundred and forty-eight students (82.68%) reported that they faced stress and anxiety somewhere in their academics (Figure-1).

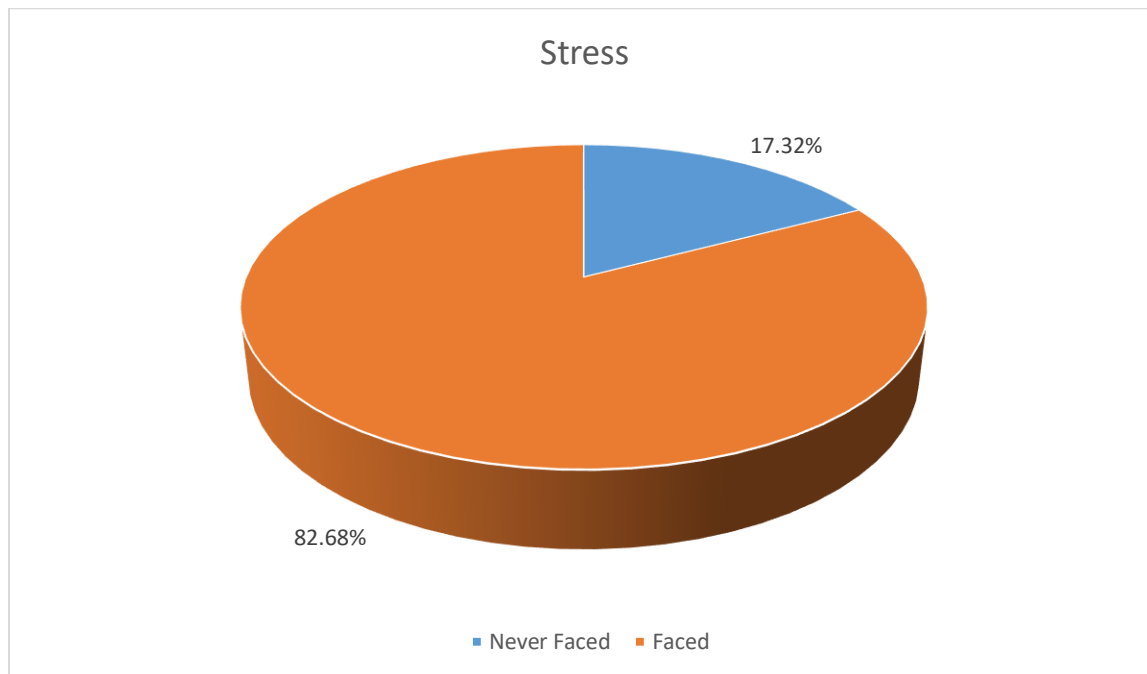


Figure-I: Proportion of different students regarding stress and anxiety.

Among different types of factors leading to this stress and anxiety were family problems (13.51%), hostel life (27.03%), improper diet (8.78%), chronic diseases

(3.38%), fear of future (21.62%), and assignment and examinations (25.68%) (Figure-II).

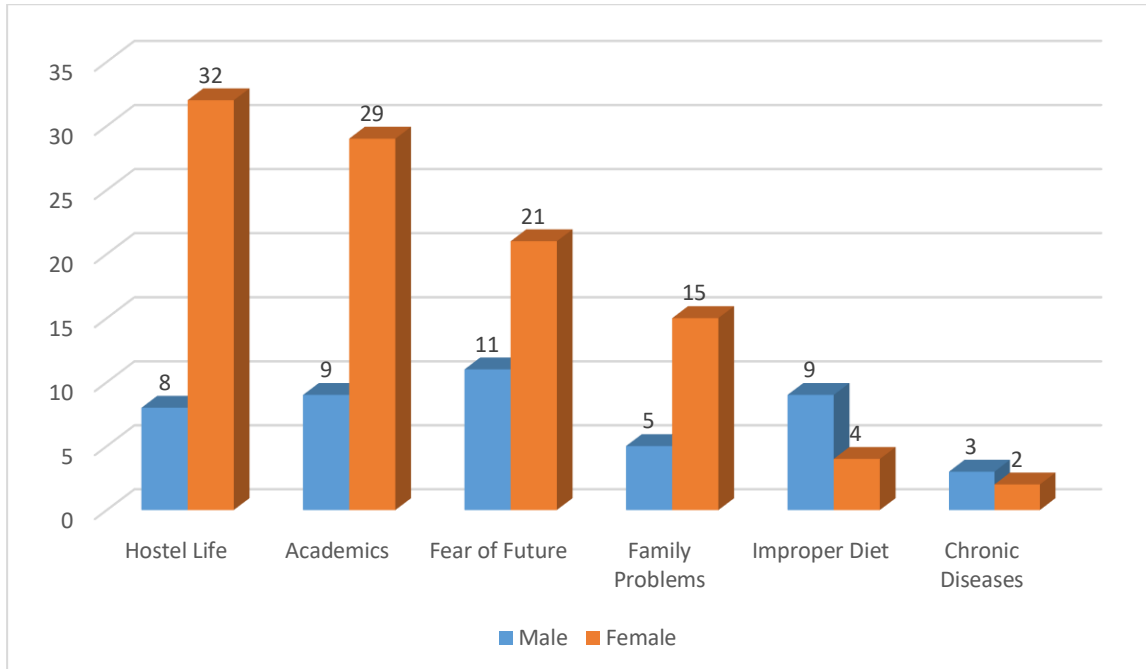


Figure-II: Distribution of students according to different risk factors

**DISCUSSION:**

According to studies, stress happens due to multiple reasons often aggravating each other. In this study, we

included medical and dental college students and especially the final year students. The reason was this inclusion criterion was that the final year students

suffer irregular routines due to academics and ward-rotations than any other class and this final year presents the true picture of medical education stress problems.

Our study concluded that more females face stress or anxiety during their academics as compared to male students. This can also be biased because a lesser number of male students were included in this study. However different studies by Wentz et al., and Misra et al., support these results i.e. more females suffer from stress [9,10]. The stress faced by students might be occasional i.e. during an assignment or lecture and it may be persistent i.e. hostel life, family problems or doubts about the future. In Pakistan, most of the doctors fear about their future due to the lower salaries hence a lower quality of life [11].

#### LIMITATIONS:

There are certain limitations to this study i.e. we included a smaller number of students in this study and we didn't collect data regarding different handling techniques used by students in order to relieve their stress.

#### CONCLUSION:

Students from medical and dental colleges had to face a lot of stress and anxiety during their academic sessions. This stress may be for a shorter period of time or may be prolonged depending on one's ability to cope with this stress.

#### AUTHORS CONTRIBUTION:

NOORULAIN NIAZI: Data Collection and Results  
 MUHAMMAD USMAN YAMIN CHAWLA: Writing Introduction and Discussion.  
 MUSTAPHA SHESH: Writing Conclusion and editing of Manuscript

#### REFERENCES:

1. Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: A cross-sectional study. *Medical education*. 2005 Jun;39(6):594-604.
2. Khan MS, Mahmood S, Badshah A, Ali SU, Jamal Y. Prevalence of depression, anxiety and their

- associated factors among medical students in Karachi, Pakistan. *Journal-Pakistan Medical Association*. 2006 Dec;56(12):583.
3. Al-Dubai SA, Al-Naggar RA, Alshagga MA, Rampal KG. Stress and coping strategies of students in a medical faculty in Malaysia. *The Malaysian journal of medical sciences: MJMS*. 2011 Jul;18(3):57.
4. Bramness JG, Fixdal TC, Vaglum P. Effect of medical school stress on the mental health of medical students in early and late clinical curriculum. *Acta Psychiatrica Scandinavica*. 1991 Oct;84(4):340-5.
5. Shah M, Hasan S, Malik S, Sreeramareddy CT. Perceived stress, sources and severity of stress among medical undergraduates in a Pakistani medical school. *BMC medical education*. 2010 Dec;10(1):2.
6. Shapiro SL, Shapiro DE, Schwartz GE. Stress management in medical education: a review of the literature. *Academic Medicine*. 2000 Jul 1;75(7):748-59.
7. Ahmady S, Changiz T, Masiello I, Brommels M. Organizational role stress among medical school faculty members in Iran: dealing with role conflict. *BMC Medical education*. 2007 Dec;7(1):14.
8. Schmitz GR, Clark M, Heron S, Sanson T, Kuhn G, Bourne C, Guth T, Cordover M, Coomes J. Strategies for coping with stress in emergency medicine: Early education is vital. *Journal of emergencies, trauma, and shock*. 2012 Jan;5(1):64.
9. Wentz L, Liu PY, Haymes E, Ilich JZ. Females have a greater incidence of stress fractures than males in both military and athletic populations: a systemic review. *Military medicine*. 2011 Apr 1;176(4):420-30.
10. Misra R, McKean M, West S, Russo T. Academic stress of college students: Comparison of student and faculty perceptions. *College Student Journal*. 2000 Jun 1;34(2).
11. Ghazali SS, Shah IA, Zaidi SA, Tahir MH. Job satisfaction among doctors working at teaching hospital of Bahawalpur, Pakistan. *Journal of Ayub Medical College Abbottabad*. 2007;19(3):42-5.